

55. (Twice Amended) A prepreg of a honeycomb sandwich structure precursor including a honeycomb core, a stiffness-treated prepreg ply and a second prepreg ply, in the absence of a tiedown ply contacting the honeycomb core, and where the stiffness-treated prepreg ply and the second prepreg ply are disposed adjacent one another, said stiffness-treated prepreg ply comprising:

a stiffness-treated fabric including a plurality of fibers and a polymeric material disposed on at least some of the fibers, where the stiffness-treated fabric exhibits an ASTM stiffness value greater than the ASTM stiffness value of an untreated fabric; and

a resin system,

the stiffness-treated prepreg ply, when disposed on the second prepreg ply comprising a resin system and a fabric selected from the group consisting of the stiffness-treated fabric and untreated fabrics, exhibiting a frictional resistance between the stiffness-treated prepreg ply and the second prepreg ply sufficiently greater than the frictional resistance between two untreated prepreg plies disposed on one another, where each of the two untreated prepreg plies comprises the resin system and an untreated fabric, so as to enhance resistance to core crush during fabrication of a honeycomb core structure from the honeycomb core structure precursor.

57. (Twice Amended) The prepreg according to claim 55, wherein the frictional resistance between the stiffness-treated prepreg ply and the second prepreg ply is between 50 pounds and 175 pounds as measured by the Boeing-Wilhelm method.